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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Docket Number (Optional) PRE-APPEAL BRIEF REQUEST FOR REVIEW 03226/368001; P7878 Application Number Filed 10/731,713-Conf. December 9, 2003 #5463 First Named Inventor Paul Durrant Art Unit Examiner 2163 H. R. Rose Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. I am the applicant /inventor. /Robert P. Lord/ Signature assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) Robert P. Lord is enclosed. (Form PTO/SB/96) Typed or printed name attorney or agent of record. 46,479 Registration number (713) 228-8600

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

\*Total of forms are submitted.

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34.

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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Paul Durrant

Confirmation No.: 5463

Application No.: 10/731,713

Art Unit: 2163

Filed: December 9, 2003

Examiner: H. R. Rose

For: APPARATUS AND METHOD FOR

SWITCHING MODE IN A COMPUTER

SYSTEM

MS AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# PRE-APPEAL BRIEF REQUEST FOR REVIEW

## Authority

Applicant's claims have been rejected at least twice, so filing a Notice of Appeal with proper fee and a pre-appeal brief request for review is proper. See 35 U.S.C. §134.

### **Disposition of the Claims**

Claims 39-75 are pending in this application. Claims 39, 53, 55, and 62 are independent. The remaining claims depend, directly or indirectly, from claims 39, 53, 55, and 62. Claims 39-75 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,349,355 ("Draves") in view of U.S. Patent No. 5,948,097 ("Glew").

#### Remarks

Claim 39-75 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Draves in view of Glew. The rejection is respectfully traversed.

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"Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art are to be resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined" *Graham v. John Deere*, 383 U.S. 1 (1966). *In re Royka* holds that to establish prima facie obviousness of a claimed invention, all the claim limitations must be shown or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ (CCPA 1974).

In the instant case, as detailed below, certain limitations are not shown or suggested by *any* of the prior art of record. The claimed invention is directed to switching between a privileged mode and a non-privilege mode. The claimed invention requires that both a privilege region of memory and a non-privilege region are established. Once the privileged region and non-privileged region are established, a memory address may specify a storage location in the privilege region of memory or in the non-privileged region of memory. Specifically, a memory address an address of memory or a mechanism to identify a storage location in memory.

Accordingly, when a request is received for accessing a memory address, a determination is made about whether the memory address is in the privileged region of memory. If the memory address is in the privileged region of memory, then the system is switched to privileged mode. Thus, the request for access the memory address triggers the switch to privileged mode.

Independent claims 39, 53, 55, and 62 require, in part, the following: (i) determining whether the memory address is in the privileged region of memory in response to a request, and (ii) switching the system to privileged mode if the memory address is determined to be in the privileged region of memory.

Draves and Glew, whether considered together or separately, fail to teach or suggest "determining whether the memory address is in the privileged region of memory in response to a request"

As stated by the Examiner, Draves does not disclose the aforementioned limitation (See Office Action dated December 21, 2006, page 3). Further, Glew does not teach or suggest that which Draves lacks. In order to support the rejection, the Examiner attempts to equate the memory address of the present invention to instructions in Glew. Specifically, the Examiner equates the memory address to the SYSENTER instruction and SYSEXIT instruction. This is improper.

Specifically, in contrast to a memory address that specifies a storage location of memory, an instruction is mere data that does not specify any storage location of memory. In particular, an instruction may be stored at a storage locations specified by a memory address, but an instruction is not itself a memory address. For example, when the central processing unit requires the next instruction to process, the next instruction may be obtained from the storage location specified by the memory address. Accordingly, the memory address is required to retrieve the instruction. Furthermore, the instruction may be moved from the storage location specified by one memory address to another storage location specified by another memory address. The moving of the instruction does not alter the instruction. Because the storage location is specified by a memory address and the storage location may contain an instruction, a memory address cannot be equated to an instruction. Thus, the Examiner's assertion that a memory address of the claims of the present invention is disclosed in Glew as an instruction is incorrect.

Furthermore, the claims of the present invention require a determination of the portion of memory in which the memory address is located. Glew is completely silent with respect to "determining whether the memory address is in the privileged region of memory in response to the request." The only memory that Glew discloses is that non-privileged **code** stores a data value, which represents a print function, in memory (*see*, *e.g.*, Glew col. 5 ll. 54-67). Glew makes no disclosure as to where the data value is stored in memory, much less that there could be multiple

regions of memory. In fact, Glew fails to even mention the memory address of the data value. Because, in Glew, the only mention of memory is the storage of the data value without specifying where it is stored or even that there might be multiple storage locations, Glew cannot disclose determining whether a memory address is in a privileged region or non-privileged region of memory.

Moreover, Glew would not even need to contemplate determining whether the memory address is in a privileged or non-privileged region of memory as the invocation of the SYSENTER call, and not the storage location of memory address, causes the execution to be transferred to the privileged operating system kernel code (*See* e.g., Glew col. 5, ll. 34-36).

Thus, neither Draves nor Glew may be used to teach or suggest "determining whether the memory address is in the privileged region of memory in response to a request" as recited in claims 39, 53, 55, and 62.

Draves and Glew, whether considered together or separately, fail to teach or suggest "switching the system to privileged mode if the memory address is determined to be in the privileged region of memory"

As stated by the Examiner, Draves does not disclose the aforementioned limitation (See Office Action dated December 21, 2006, page 3). In addition, Glew fails to teach or suggest switching the system to privileged mode if the memory address is determined to be in the privileged region of memory. Specifically, the portion of Glew relied upon by the Examiner merely teaches switching execution to privileged code (See Office Action dated December 21, 2006, page 3-4 and Glew col. 2 ll. 34-38). The only switch to privilege code taught by Glew is based on a System Call Instruction ("[T]wo instructions are used to perform the fast system call to the operating system. The SYSENTER and SYSEXIT instructions are used to enter and exit, respectively, the desired operating system procedure" (emphasis added) (see Glew col. 5, ll. 10-14)). Moreover, Glew does

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not even have multiple regions of memory. Therefore, Glew cannot teach switching the system to

privileged mode if the memory address is determined to be in the privileged region of memory.

In view of the above, neither Draves nor Glew may be used to teach or suggest "switching

the system to privileged mode if the memory address is determined to be in the privileged region of

memory" as recited in claims 39, 53, 55, and 62.

Conclusion

In view of the above, the Examiner has failed to satisfy the requirements of 35 U.S.C. §

103(a). Specifically, Draves and Glew, whether considered separately or in combination, fail to

teach or suggest all of the limitations of independent claims 39, 53, 55, and 62. Dependent claims

40-52, 54, 56-61, and 63-75 are allowable for at least the same reasons. Accordingly, a favorable

decision from the panel is respectfully requested. Please apply any charges not covered, or any

credits, to Deposit Account 50-0591 (Reference Number 03226/368001).

Dated: September 14, 2007

Respectfully submitted,

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